4.4 Techno-Business Park Area

The techno-business park performance standards encourage the development of light industrial, office, consultant, and research uses that are generally compatible with one another and with adjoining residential and/or commercial areas. The standards for the Techno-Business Park area conform to those found in the IB Zone of the Surrey Zoning By-law.

Objectives

- to encourage the creation of a complete, mixed-use community through the integration of industry and commercial business in the business park with other land uses in East Clayton;
- to encourage healthy, safe, and clean business and industry while addressing area character and environmental concerns; and
- to accommodate on-site infiltration of the "six-month storm", through the incorporation of detention and infiltration systems (see Section 5.0 for detailed performance stand ards regarding on-site infiltration/detention measures).

4.4.1 Land-Use Compatibility

- To ensure compatibility between the business park and the adjacent work/live area, all new development may be asked to demonstrate, through a report from a qualified acoustical and/or environmental engineer, either that there are no negative impacts on residential liveability or that they can be mitigated through appropriate design.

4.4.2 Relationship of Buildings to Streets

4.4.2.1 Building Orientation

- The massing, setback, and orientation of the building are to create a positive relationship between industrial buildings and the streets onto which they face, both in order to reinforce the character of the surrounding work/live area, and to enliven the surrounding streets. Ways of achieving this include:
  - facing ground-floor offices and commercial services toward the street and sidewalk with maximum areas of clear glass;
  - achieving a maximum front setback of 9 metres (30 feet);
  - orienting corner buildings so that the façades address both streets with some architectural expression at the corner being appropriate;
  - maintaining a near-continuous street frontage; and
  - screening any large parking areas from the street.

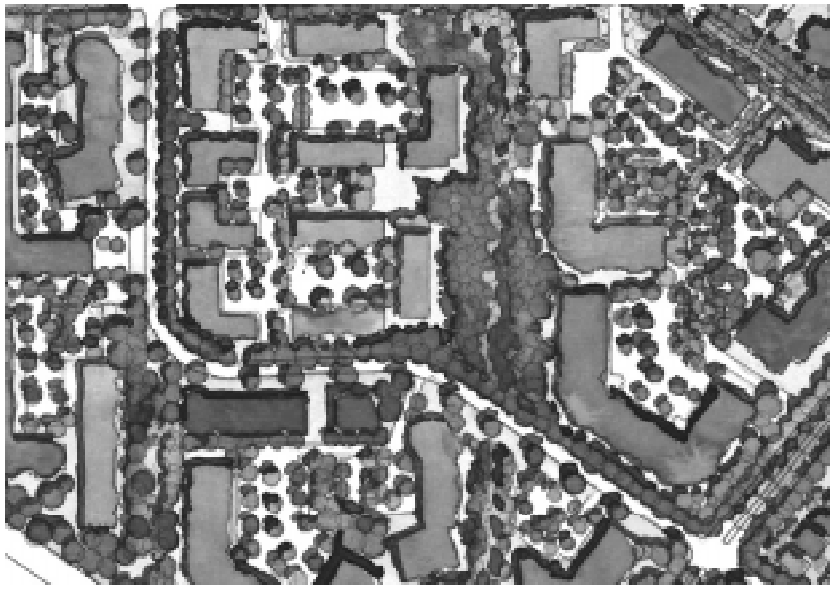
4.4.2.2 Entries and Courtyards

- These are to provide direct pedestrian access, at the fronting street, to the building or ground-level individual rental or strata units. Upper-floor units are to be entered through a central entry lobby off the public street or through individual suite doors provided at grade.

Techno-Business Park

The plan designates approximately 11.97 hectares (29.58 acres) of the south-central portion of the site (between 192nd Street and 188th Street) as a Techno-Business Park area. This designation will provide for advanced technology, research and development industries, and compatible commercial uses that complement these light industrial activities.

Plan view of Techno-business Park area in the southwest quadrant of the site. Front building setbacks of 9 metres (30 feet) provide a landscape buffer area for infiltration and maintain a positive relationship between the building and the street. Rear parking lots are divided into parcels big enough to serve each individual building and to allow adjacent buildings to share space. Each parking area features pervious surface treatment (i.e., porous pavement, pavers) and is generously planted with trees.



This high-tech building features generous glazing, massing that relates to its interior functions, and human-scaled detailing – elements that contribute to a strong street presence. Parking is provided to the side and is shielded from the sidewalk.

4.4.2.3 Parking, Loading, and Storage

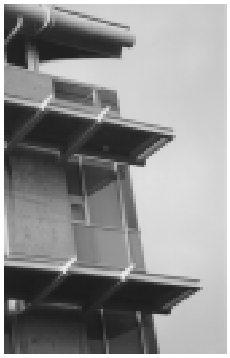
- Parking entries off public streets should be a maximum of 8 metres (26 feet) wide in order to reduce visual impact. The entries to the parking and loading areas are also to be located so as to reduce the visual impact on the street.
- The use of large, impermeable parking surfaces is to be avoided. Surface parking lots are to be planted with shade trees at an approximate ratio of one tree for every five spaces. (Tree species with a canopy large enough to cover, at tree maturity, a minimum of 50 percent of each parking surface shall be chosen in consultation with the Parks Department.)
- Trees planted in parking areas should be protected by bollards or other barriers.
- In surface parking areas, the use of permeable paving is required in order to reduce surface runoff.
- Garbage container storage areas as well as heating and mechanical equipment are to be enclosed, located, or screened so as not to be visible.

4.4.3 Built Form and Materials

4.4.3.1 Massing and Articulation

- A single dominant building mass is to be avoided. Variations in massing are to include changes in height and horizontal plane. Changes in massing are to relate to the building's structural systems and to reflect the interior arrangement of space.
- Glazing is encouraged on all street-facing façades so as to create visual connections between street/open spaces and building users.
- All sidewalks adjacent to retail and office uses are to be provided with rain protection.

Near right: Landscaped setbacks and unit pavers maximize infiltration and define the building entry. The glass awning provides weather protection and allows light into the foyer.
Far right: Light shelves provide shade to south facing offices and animate the facade.



4.4.3.2 Exterior finishes

- Building material is to reflect the regional climate and landscape and to express an urban industrial aesthetic while being compatible with the character of the surrounding residential neighbourhoods.
- Recommended exterior finishes include masonry, concrete, stucco, glass, and steel.

4.4.4 Environmental Design

4.4.4.1 Rain Protection and Signage

- Building entries should include canopies or rain protection that are approximately 3 metres (10 feet) above grade and that protrude no more than 2.5 metres (8.2 feet) from the building.
- Building entrances should be articulated with recesses, awnings and/or canopies, and signs that are appropriate to the architectural language and material expression of the building. Clear glass and metal are considered appropriate materials.
- Entries of buildings should be highly visible, clear glazed, and easily recognized from the street.

4.4.4.2 Climatic Response, Light and Ventilation

- As much as possible, all offices are to be oriented so that a maximum amount of workspace receives direct sunlight, and they are to incorporate terracing, overhangs, awnings or trellises that allow the low winter sun, but not the high summer sun, to penetrate the space.
- Landscaped courtyards are encouraged in order to provide sufficient light and ventilation into large floor plates. All courtyards should include trees and have unit pavers to ensure infiltration on all hard surfaces.
- Solar shading and light shelves are recommended, especially on south facing facades, as part of an energy-efficient design and as a means of animating façades.

4.4.4.3 Crime Prevention Through Environmental Design

- Consider appropriate safety and natural surveillance measures (such as lighting design and visual access/surveillance) as per CPTED principles.
  - Sidewalks/walkways with the appropriate lighting and low landscaping are to be provided between parking areas and building entries.
  - Any recessed entries and/or blind corners are to be avoided. It should be possible to see into stairwells and halls.
  - Servicing, amenity, and storage rooms are to be grouped together in a visible locale for easy surveillance.
  - Buildings should maximize opportunities for surveillance of sidewalks, entries, circulation routes, and parking areas.